## College of Non-Conventional Vocational Courses for Women, Kolhapur

Department of Food Technology

## PROGRAMME SPECIFIC OUTCOMES

Sr. No.	Programme	Specific Outcome
1.	B. Sc. Food Technology & Management (OLD)	<ul> <li>To increase the employability of women in the food processing sector of Indian economy which has been accorded priority in policy making.</li> <li>To expose the participant to the basic essentials of Food Technology &amp; preservation so that they become capable of independently handling food processing units.</li> <li>To make them understand the nutritional side which may help inculcate the scientific view regarding dietary habits of population.</li> <li>To enable the participants to keep themselves abreast of recent changes in Food Technology and Management.</li> <li>To create necessary awareness regarding the laws affecting Food Processing and Preservation.</li> <li>To inculcate entrepreneurship attitude and self-employment attitude.</li> </ul>

	COURSE OUTCOMES	
Class	Course Code / Course Name	Course Outcome
B.Sc. (FTM) I Semester I Old	Communication Skill- I	<ul> <li>Analyse &amp; re-state the meaning of a text in English</li> <li>Develop the ability to speak English language with the right pronunciations</li> </ul>
		• Express values & skills gained through effective communication.
	Introduction to Food Science- I	<ul> <li>Discuss &amp; socialize effectively in English.</li> <li>Understand the food groups and their functions</li> <li>Use combination of foods in the development of food products.</li> <li>Identify and control adulterants in various foods &amp; evaluate food quality</li> <li>Gain deep knowledge of pulses, nuts &amp;</li> </ul>
	Principles of food preservation - I	<ul> <li>oilseeds</li> <li>Gain knowledge about the principles involving food preservation by moisture control, application of heat, removal of heat, fermentation and emerging technologies.</li> <li>Distinguish between high &amp; low temperature processing.</li> </ul>
	Human Physiology-I	<ul> <li>Relate the structures with functions of tissues &amp; organs</li> <li>Understand the functions of important physiological systems such as cardiovascular, respiratory, renal, and endocrine and digestive systems.</li> </ul>
	Food Chemistry I	<ul> <li>Understand reactions of carbohydrates, lipids and proteins during storage and processing of food and how these influence the quality and properties of the food.</li> <li>Gain knowledge related to important sources of vitamins and minerals in food and their functions</li> </ul>
	Food Microbiology I	<ul> <li>Explain types, characteristics and significance of microorganisms</li> <li>Describe the structure and functions of major components of microbial cells</li> <li>Understand the concept of microbial growth, its measurement and growth curves, factors influencing their growth and survival.</li> <li>Discuss various methods of sterilization and disinfection</li> </ul>
	Introduction to computer- I	<ul> <li>Apply knowledge of computer appropriate to the discipline</li> <li>Ability to use current techniques, skills, and tools necessary for computing practice</li> </ul>

## **COURSE OUTCOMES**

Class	Course Code / Course Name	Course Outcome
B.Sc. (FTM) I Semester II Old	Communication Skill- II	<ul> <li>Learn the techniques of effective interview</li> <li>Improving presentation skills &amp; speech for conferencing.</li> </ul>
	Introduction to Food Science- II	<ul> <li>Understand the food groups and their functions</li> <li>Explore knowledge regarding nutritive value &amp; value added products of fruits, vegetables &amp; spices.</li> </ul>
	Principles of food preservation - I	<ul> <li>Gain knowledge about the principles involving food preservation by moisture control, application of heat, removal of heat, fermentation and emerging technologies.</li> <li>Explore the principle of preservation in non-thermal processing of food.</li> </ul>
	Human Physiology II	<ul> <li>Understand the functions of important physiological systems such as renal, endocrine, nervous and digestive systems</li> <li>Recognise the clinical symptoms of nutritional deficiencies</li> </ul>
	Food Chemistry - II	<ul> <li>Understand the importance of water for stability and quality of foods.</li> <li>Learn the chemistry of additives influencing colour and flavour of food knowledge.</li> <li>Gain knowledge of various minerals &amp; their deficiency diseases.</li> </ul>
	Food Microbiology - II	<ul> <li>Acquire knowledge about various media used in microbiology &amp; their functions</li> <li>Study techniques for isolation of bacteria &amp; its staining.</li> <li>Focus on biochemical properties of bacteria</li> </ul>
	Introduction to computer- II	<ul> <li>Acquire knowledge of Windows operating system &amp; MS-word in daily application.</li> <li>Learn about use of MS-excel &amp; MS-power point in documentation of food industries.</li> </ul>

Class	Course Code / Course Name	Course Outcome
B.Sc. (FTM) II Semester III Old	Human Nutrition I	<ul> <li>Gain the knowledge about human nutrition &amp; its importance in maintenance of health</li> <li>Understand nutrition through life-cycle stages like infancy, pre-school, school going &amp; adults.</li> </ul>
	Cereal, legume and oil seed technology I	<ul> <li>Understand the basic composition and structural parts of food grains.</li> <li>Aware the importance of physico-chemical properties of food grains.</li> <li>Understand the basics of milling operations of food grains</li> </ul>
	Analytical Techniques I	<ul> <li>Acquire skills to estimate the nutrient analysis by different methods for various nutrients</li> <li>Competence to use different instruments like calorimetry, spectrophotometry and Atomic absorption spectroscopy.</li> </ul>
	Food Biochemistry I	<ul> <li>Understand the relevance of various metabolism of carbohydrates, proteins, fats and their related disorders.</li> <li>Learn about regulation of acid-base balance, study of enzymes &amp; hormones</li> </ul>
	Food Microbiology I	<ul> <li>Categorise the sources, contamination &amp; spoilage of respective food groups.</li> <li>Learn about different microbial spoilage of milk &amp; milk products</li> </ul>
	Dairy Technology I	<ul> <li>To understand processes involved in production of milk and milk products</li> <li>Understand &amp; apply drying process in manufacturing of dried milks</li> </ul>
	Agri-business Management I	<ul> <li>To study processing, warehousing, distribution, marketing and retailing of the products used in agriculture.</li> <li>It encompasses farm planning, weather forecasting, research, soil management, seed production, machinery &amp; harvesting.</li> </ul>
	Environmental studies	<ul> <li>Creating awareness about environmental problems amongst people.</li> <li>Imparting basic knowledge about environment and its allied problems.</li> <li>Developing an attitude of concern for the environment.</li> <li>Acquiring skills to help the concerned individuals in identifying and solving environmental problems</li> </ul>

Class	Course Code / Course Name	Course Outcome
B.Sc. (FTM) II Semester III Old	Human Nutrition II	<ul> <li>Understand nutrition through life-cycle stages like pregnancy, lactating women, expectant mothers &amp; old age.</li> <li>Know about growth &amp; development and nutritional requirement during pregnancy &amp; lactation to promote healthy living.</li> </ul>
	Cereal legume and oil seed technology II	<ul> <li>Identify the anti-nutritional factors in Cereal legumes and oil seeds.</li> <li>Learn the basic operations in oil extraction &amp; refining of oil.</li> <li>Know processing of value added products from oilseeds</li> </ul>
	Analytical Techniques II	<ul> <li>Competence to use different instruments like Electrophoresis &amp; flame photometer.</li> <li>Learn about principle, working of flourimetry &amp; different chromatographic techniques.</li> </ul>
	Food Biochemistry II	<ul> <li>Understand the application of enzymes in food biochemistry.</li> <li>Know the structure of DNA &amp; RNA.</li> <li>Study normal &amp; abnormal metabolism of proteins, carbohydrates, lipids &amp; nucleic acids.</li> </ul>
	Food Microbiology II	<ul> <li>Enumerate food poisoning, food borne-hazards &amp; food intoxication of microbial origin.</li> <li>Introduce immunity &amp; understand the factors affecting immunity</li> <li>Study role of micro-organisms in fermented foods.</li> <li>Acquire knowledge of genetically modified foods.</li> </ul>
	Dairy Technology II	<ul> <li>Understand &amp; apply drying process in manufacturing of dried milks</li> <li>Learn various processes involved in manufacturing of indigenous dairy products.</li> </ul>
	Agri-business Management II	<ul> <li>To apply knowledge of marketing of produce, storage, supply chain operations, financing, food processing, retailing and much more.</li> <li>Know all the activities ranging from farm planning to get the food.</li> </ul>
	Environmental studies	<ul> <li>Developing an attitude of concern for the environment.</li> <li>Acquiring skills to help the concerned individuals in identifying and solving environmental problems.</li> </ul>

Class	Course Code / Course Name	Course Outcome
B.Sc. (FTM) III Semester V Old	Therapeutic Nutrition I	<ul> <li>Understand the concept of therapeutic nutrition &amp; diets.</li> <li>Acquire knowledge in preparing diet for fever, obesity, underweight &amp; gastro-intestinal diseases.</li> </ul>
	Bakery and Confectionery I	<ul> <li>Provide deeper knowledge and making students understand about skill development training on bakery science and technology.</li> <li>Learn commercial manufacturing of bread, biscuits, cookies, pastries, buns, crackers &amp; quick bread.</li> </ul>
	Animal Product Technology I	<ul> <li>Learn the skills required for pre-slaughtering of meat and further processes.</li> <li>Acquire knowledge of structure, composition &amp; different preservation techniques of preserving eggs.</li> </ul>
	Processing and preservation of fruits and Vegetables I	<ul> <li>Preserve the fruits and vegetables and make their products to make available them in off season.</li> <li>Provide solution for spoilage of fruit and vegetables while handling and storage.</li> <li>Learn about storage of fruits and vegetables in perfect consumable condition for a longer time without change in its nutritional value.</li> </ul>
	Food, Quality, Safety and Waste management I	<ul> <li>Understand the food quality aspects and need of food safety.</li> <li>Knowing the various regulatory aspects for food business operators.</li> <li>Acquire knowledge of food laws &amp; regulations.</li> </ul>
	Community Nutrition I	<ul> <li>Understand the role of diet in prevention of diseases in community in maintaining the health of community.</li> <li>Learn various nutritional problems in India.</li> </ul>
	Industrial Business Management I	<ul> <li>Understand the conceptual learning skills in today's business environment.</li> <li>Analyse financial performance of an organization</li> </ul>

Class	Course Code / Course Name	Course Outcome
B.Sc. (FTM) III Semester VI Old	Therapeutic Nutrition II	<ul> <li>Prepare diets &amp; calculate nutrient composition for diseases of liver &amp; pancreas.</li> <li>Study etiology in diabetes mellitus &amp; cardiovascular diseases.</li> </ul>
	Bakery and Confectionery II	<ul> <li>Gain knowledge about extrusion technology &amp; manufacturing of extruded products.</li> <li>Understand detail manufacturing of amorphous &amp; crystalline confectionery products.</li> </ul>
	Animal Product Technology II	<ul> <li>Learn the processing &amp; preservation techniques used in fish</li> <li>Learn the skills required for pre-slaughtering of poultry and further processes.</li> </ul>
	Processing and preservation of fruits and Vegetables II	<ul> <li>Learn about extending the shelf life of the fruits and vegetable products with use of various preservation techniques.</li> <li>Study preparation of value added products from the fruits and vegetables.</li> </ul>
	Food, Quality, Safety and Waste management II	<ul> <li>Understand the various voluntary standards for food processing industries.</li> <li>Recognize and communicate common processing methods which convert food waste into valuable products.</li> </ul>
	Community Nutrition II	<ul> <li>Know various National Nutrition programmes in India.</li> <li>Identify food faddism &amp; faulty food habits</li> </ul>
	Industrial Business Management II	<ul> <li>Evaluate organizational decisions with consideration of the political, legal and ethical aspects of business.</li> <li>Assess strengths, weaknesses, opportunities and threats of the business environment.</li> </ul>